

SCHOOL SITE PLANNING

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The selection of an adequate, well located, school site and its development is an integral part of school plant planning. Just as a building is designed to best accommodate a school program so may the development of a school site materially enrich such program. Just as a building is designed to provide for community use so may a site be developed. In addition there is a responsibility in relation to school sites involving the stewardship of public land so that the fundamental values of the land may be preserved.

The basic reason for a building design is the housing of the educational program, in like manner the basic reason for site development is to provide an outdoor environment conducive to better operation of such program. The first factor in site selection is the usability of a site as land for learning; the degree to which the site offers instructional possibilities including the retention or development of a biosphere conducive to instructional use.

Site selection is necessary for new building construction and site evaluation is necessary for proposed building additions or rehabilitation. With transportation readily available the factor of size is generally of more importance than location. Recommendations for site size for various grade levels are:

K-6	10 acres + one acre for each 100 enrolled
Middle School	20 acres + one acre for each 100 enrolled
Junior High School	20 acres + one acre for each 100 enrolled
Senior High School	30 acres + one acre for each 100 enrolled
Combined Jr.-Sr. High School	30 acres + one acre for each 100 enrolled

In densely populated areas such site sizes are unrealistic economically but every effort should be expended to acquire as much land as possible for both school and community use.

Care in site location must be taken if a serious transportation problem exists or if housing patterns in an area would result in a school largely segregated on racial, ethnic, or socio-economic lines.

Other factors for consideration include the availability of public utilities, the cost of land, and the existence of other public areas available for school use. In all cases site utilization should be studied and decisions made before any site is selected.

Assuming that an adequate site has been acquired the design for site development should be a part of the total plant planning. In many instances sites have been acquired but developed only as a building plot and thus most of the educational advantages that could accrue are lost.

In planning site development it should first be determined what natural features can be preserved and used. These features include natural surface elevations, natural water and natural vegetation on the site. Having made this assessment it follows that planning should emphasize the use of land and vegetation to improve the microclimate and natural biosphere of the site.

The Site as Educational Space

In the preceding paragraphs the element of size was outlined for various grade levels of administrative organization. Basically, these optimum sizes are calculated to provide sufficient space for both instructional and service operations of the school program and to make allowance for community use.

In the instructional area of operation the site has had long use as space for physical education and recreation. Numbers and sizes of various game areas have been defined. In many instances equipment specifications have also been established. One of the most complete references for this phase of planning is *Planning Areas and Facilities for Health, Physical Education and Recreation* published by the Athletic Institute, Merchandise Mart, Chicago, Illinois 60654.

The goal of an adequate physical education program for all children is common at all educational levels. Site planning must therefore consider the provision for such space in adequate size and numbers.

Other portions of the educational program may also benefit from site activities if planned. In the science curriculum the natural and biological sciences can benefit from a grove of trees, a pond or stream, rock formations and other components of an outdoor laboratory. Chemistry and physics students can utilize these same components for experimentation in their respective fields. A benchmark establishing the latitude, longitude, and elevation of a point on the site can be used for a variety of activities in mathematics, physics, astronomy and allied sciences.

Art and drama department can use natural formations of the school site terrain as outdoor studios and in some instances a small amphitheater can be developed.

Some communities require on-site ranges for driver education. When this condition exists such area can be integrated into the total site concept so that a variety of driving situations may be illustrated.

The most common service use of a site is for off-street parking both for school personnel and for the public. Parking areas should be so located as not to be a safety hazard and yet be readily accessible to the building. If possible, busloading areas and drives should be independent of automobile drives and loading areas. All schools require the delivery of supplies and the removal of trash and garbage and if possible a separate service drive and staging area is desirable.

School sites may also need to have on-site water supply or surface sewage treatment facilities. When this need is present such *installations* should be physically separated from areas of both student and adult use. It is required that proposed school sites be approved by the health department having jurisdiction if on-site water supply and/or sewage treatment and disposal is to be provided.

The Site as Recreational Space

With the growing population in urban areas the amount of public land available for recreational activities is diminishing. The school site, developed for student physical education already has many features usable for recreation by both youth and adults. The additional development of picnic and trail areas can provide space for full community use. In some localities the school authorities and municipal authorities have jointly developed a school-park

accessible and usable by all. Minor changes in building location and design can often make portions of such facilities available for non-school use.

The Site as Public Land

With the acquisition of a school site the owner assumes a stewardship obligation to prevent deterioration and to revitalize the land if necessary. Natural terrain should be left undisturbed as much as possible in order to retain normal erosion patterns and growth. Judicious planting of trees and shrubs can control drifting of snow and thus make much of the site useable on a full year basis. In like manner such plantings can control sun glare and act as both thermal and acoustical insulation where desired.

Although discussed separately the design for site development should be integrated with the total planning process. Certain site conditions may dictate the location of a building and site design will be dependent upon such location. In many instances the amount of land for complete development is not available and compromises must be made. Close cooperation between the school and other public agencies is advisable so that maximum benefits may be had from available land resources.

SITE PLAN APPROVAL CRITERIA

Approvals Required From Other Agencies

Vehicle traffic impact and access – Local or County Road Commission

Groundwater discharge – local health department or Department of Environmental Quality

Storm water runoff – Local or County Drain Commission

Noise abatement – Local agency

Soil erosion – Local agency or Department of Environmental Quality.

Wells – Local health department or Department Environmental Quality

Fire and Emergency Access

The minimum standards shall be Appendix C, Fire Hydrant Locations and Distribution and Appendix D, Fire Apparatus Access Roads in the International Fire Code 2003, published by the International Code Council.

Provide a report of the review by the local fire service.

On Site Traffic Analysis

Provide analysis of pedestrian, passenger vehicle service and bus traffic. Show appropriate separation.

Surrounding Land Use

Provide land use and/or zoning classification surrounding the site for 500 feet.

Submit the local standards for land use and buffer zones with an analysis and proposed design.

Site Physical Features

Provide existing and new site grading.

Provide floodplain information.

Provide utility location and connections.

Off-Street Parking Requirements

Minimum parking space size to be 9 feet x 18 feet.

Minimum number of parking spaces:

Elementary/Junior High Schools	1 parking space per employee 1 parking space per classroom
High School	1 parking space per employee 1 parking space per 10 students
Assembly Facilities	1 parking space per 6 seats in an auditorium 1 parking space per 5 seats in a stadium or arena